State of Alaska
FY2008 Governor's Operating Budget

Department of Environmental Conservation
Laboratory Services
Component Budget Summary

Component: Laboratory Services

Contribution to Department's Mission

Provide analytical and technical information in support of state and national environmental health programs.

Core Services

- Inspect and certify private labs.
- Test food, water, seafood, shellfish, and domestic and wild animals.
- Analyze fish tissue for chemical, microbial, and marine toxin contaminants.
- Permit and inspect dairy and meat producers.
- Permit and monitor the movement of animals and animal vaccines.
- Monitor and control animal diseases.

End Results	Strategies to Achieve Results
A: Information is available for assessment of risks to public health, welfare and the environment. Target #1: All requested tests are completed. Measure #1: The % of tests requested that receive results.	**A1: Provide information relating to risks associated with chemical and biological contaminants.** Target #1: All requested tests for chemical and biological contaminants are complete. Measure #1: The % of requested tests for contaminants that receive results. **A2: Provide information relating to risks associated with animal diseases.** Target #1: All requested tests for animal diseases are complete. Measure #1: The % of requested tests for animal diseases that receive results. **A3: Provide information relating risks associated with toxins.** Target #1: All requested tests for toxins are complete. Measure #1: The % of requested tests for toxins that receive results.

Major Activities to Advance Strategies

- Test shellfish and seafood.
- Test food and drinking water samples.
- Evaluate fish for persistent organic pollutants.
- Test animals.
- Review and certify private labs annually.
- Train EH staff on drinking water sampling and testing protocols annually.
- Screen and/or inspect dairy farms and processors.
- Issue animal health certificates.
- Investigate animal disease complaints and outbreaks.

FY2008 Resources Allocated to Achieve Results

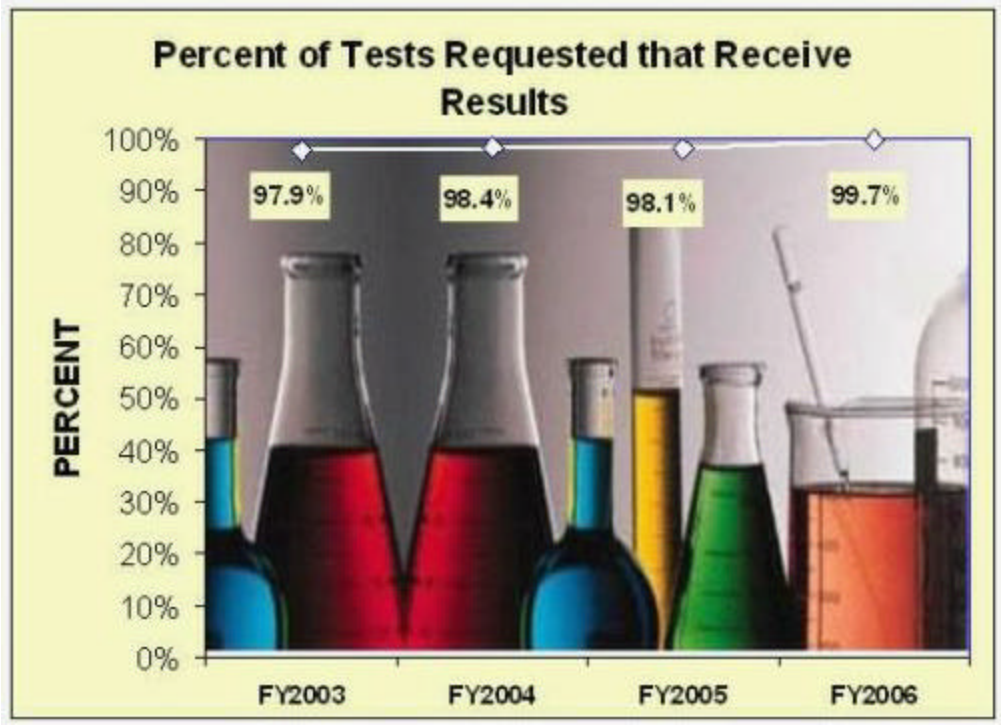
FY2008 Component Budget: $3,061,100

Personnel:	
Full time	24
Part time	0
Total	24

Performance Measure Detail

A: Result - Information is available for assessment of risks to public health, welfare and the environment.

Target #1: All requested tests are completed.
Measure #1: The % of tests requested that receive results.

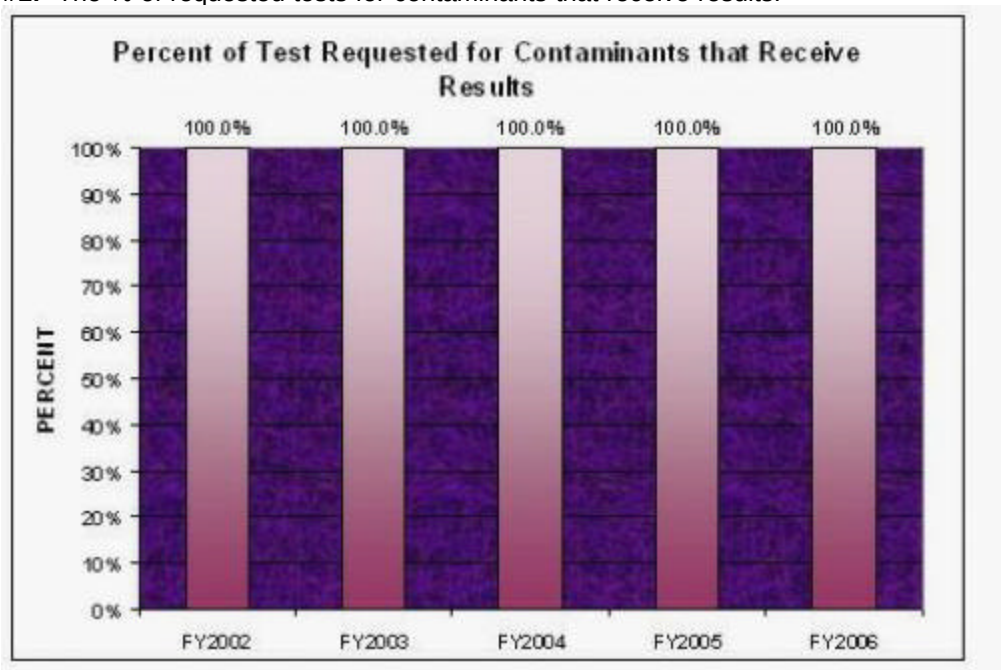


Analysis of results and challenges: The Environmental Health Laboratory's Target is to provide optimal customer service in the form of accurate, timely, and reliable results for 100% of the requests received. In addition to performing both biological and chemical analysis, the laboratory will continue to perform certification inspections for drinking water and environmental testing laboratories throughout the state.

During FY2006 a new state-of-art testing Environmental Health Laboratory with enhanced testing capabilities was constructed. The new facility includes testing labs for seafood toxins, bacteriology, immunology, dairy, animal diagnostics, chemical analysis, and molecular biology. New processes were developed and implemented during FY2006. They included: a Quality Management Program, Safety Program, Security Program, Laboratory Information Management System, Animal Diagnostic Program, and Molecular Biology Program. The transition from Palmer to Anchorage was completed in December of 2005.

A1: Strategy - Provide information relating to risks associated with chemical and biological contaminants.

Target #1: All requested tests for chemical and biological contaminants are complete.
Measure #1: The % of requested tests for contaminants that receive results.



Analysis of results and challenges: Mercury testing of fish tissues is the primary testing activity for this measure. Because Alaska is a leading producer world wide for seafood, methyl mercury in fish has become a high profile issue. The Division of Environmental Health is the regulatory agency responsible for assuring the safety of commercially harvested fish for national and international markets, as well as subsistence and sport fish consumers.

The toxicity of mercury to man and animals in large doses is well known and has a long history. Mercury is a naturally occurring element and widely distributed in the environment. Ores bearing mercury are mined worldwide and the refined mercury used in many commercial applications. Mercury is also found in trace quantities in fossil fuels such as coal and released into the environment when burned. With the advancement of science and refined measuring techniques for mercury, trace amounts were detected in the environment but more importantly, found in the water and food that we consume.

Mercury that enters the food chain is of particular concern due to its more toxic organic form as methyl mercury. The more toxic compound is formed when bacteria, for unknown reasons, convert elemental mercury to methyl mercury. Once this conversion to methyl mercury takes place the mercury is now in a form that is known to bioaccumulate. This bioaccumulation factor becomes significant among predatory fish and animals, with man being the top predator in the food chain.

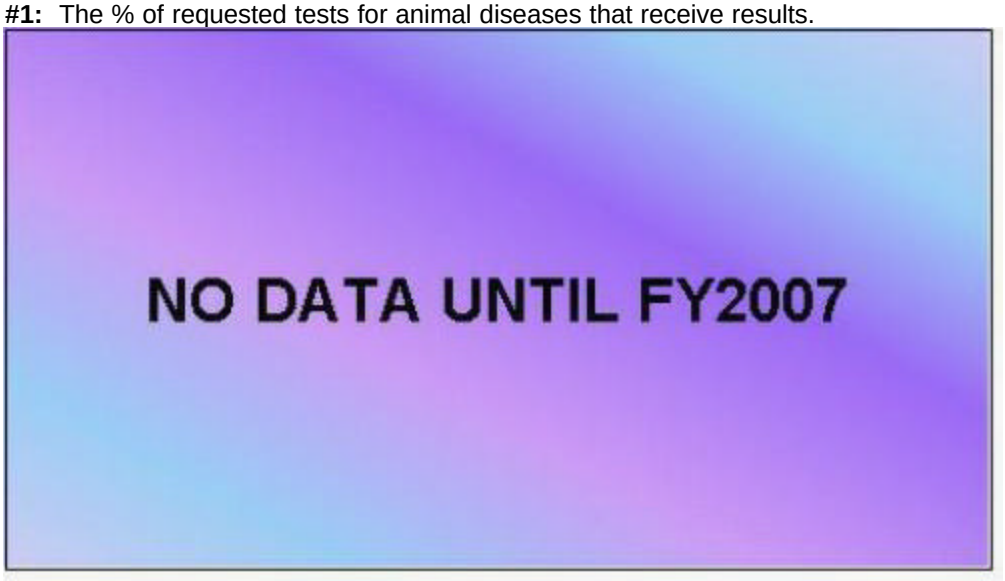
The significance of methyl mercury in fish became a concern more than 30 years ago. The US Food and Drug Administration set a regulatory level of 1ppm (part per million) for fish entering commerce. At the time this was considered a safe level for food consumption. Recent studies by the World Health Organization, US Environmental Protection Agency and private organizations indicate that the 1ppm level may not protect all segments of the population, particularly children, expectant mothers and women of child bearing age who consume fish on a regular basis.

Although there is little that can be done from the regulatory standpoint to eliminate the methyl mercury issue, it is the Division of Environmental Health's responsibility to provide information through laboratory testing that will identify problems if lower regulatory levels are imposed. The accumulation of methyl mercury data for all species of fish will also allow consumers to make informed choices for consumption of Alaska fish. The Division's

Environmental Health Laboratory began collecting data in 1997 and is gradually expanding its data base on the many fish indigenous to Alaska, both freshwater and saltwater species. As this data becomes available, it is viewable to the public on the Division's web page.

A2: Strategy - Provide information relating to risks associated with animal diseases.

Target #1: All requested tests for animal diseases are complete.
Measure #1: The % of requested tests for animal diseases that receive results.

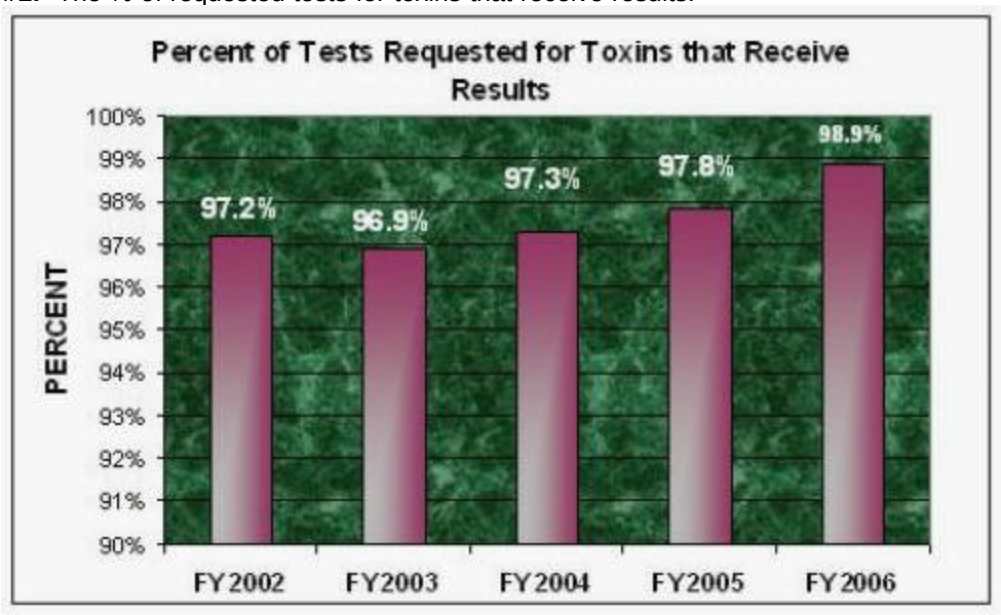


Analysis of results and challenges: This strategy provides the State of Alaska with the initial framework to monitor farm animals and wildlife for emerging diseases. Subsequent to the first reported case of "mad cow" disease in the United States, it has become more critical for the State Environmental Health Laboratory to develop the capability to test for various Transmissible Spongiform Encephalopathy (TSEs). Currently the Laboratory has been certified by USDA to perform Avian Influenza testing on samples collected from birds.

More animal tissue examination and molecular testing using DNA amplification will be possible in the future. It is expected that this testing scheme will be expanded from Chronic Wasting Disease (CWD) surveillance in wild game to Bovine Spongiform Encephalopathy (BSE) "mad cow" and scrappies surveillance in domestic animals. Data for this measure will be available mid FY2007.

A3: Strategy - Provide information relating risks associated with toxins.

Target #1: All requested tests for toxins are complete.
Measure #1: The % of requested tests for toxins that receive results.



Analysis of results and challenges: Paralytic Shellfish Poison (PSP) toxins are toxins produced by microscopic organisms that accumulate in shellfish through their natural feeding processes. These toxins affect humans, other mammals, and possibly birds when toxic shellfish are ingested. There is no known antidote once a person has ingested shellfish containing these toxins, nor is there any way of knowing, just from looking, whether or not a particular shellfish is toxic. If the person can be diagnosed soon enough after presenting with symptoms and can be placed on a respirator, the body will eventually cleanse itself of the toxins. The current method for detecting and quantifying these toxins is the mouse bioassay using extracts prepared by an AOAC (Association of Official Analytical Chemists) approved method. A chemistry procedure using High Pressure Liquid Chromatography (HPLC) was recently approved by AOAC and will become the new method of choice at the Environmental Health Laboratory in Anchorage.

Using a graduated uniform sampling plan, shellfish from commercial shellfish growing areas are routinely tested for these toxins. Since the department started the testing program in the early 1980's, no known illnesses have occurred from commercially harvested Alaskan grown shellfish.

All samples submitted to the laboratory are assigned a number and nearly all samples are tested. Although the intent is to test 100% of the samples received, occasionally samples are submitted in a decomposed condition that prevents testing; or the submitter will request that the sample not be tested for a variety of reasons. These factors would account for a percent completion being less than 100%.

Key Component Challenges

Operating the new Environmental Health Laboratory within existing financial resources is an ongoing challenge. Ancillary procedures performed to support each result are necessary, but create workload. Currently, the lab reports approximately 25,000 results on 15,000 samples annually, which require more than 64,000 tests to be performed. Such ancillary tests include quality controls, proficiency tests, validation and teaching tests - all of which are required to achieve and maintain testing certifications from federal regulatory agencies

Assuring others of the safety of Alaska's wild fish resources continues to be an issue. Buyers of Alaska's seafood products continue to ask for assurance that they have not been altered by pollution. Recent articles emphasize contamination of our food resources, especially fish, with environmental pollutants like mercury. Authors of these articles question the benefit of a fish diet and recommend restricted consumption. The EHL is continuing a fish tissue testing program to sample and test salmon, halibut and other species for persistent organic pollutants and heavy metals. Continued monitoring is necessary to assure buyers that our wild fish resources are not negatively impacted by persistent organic pollutants (pesticides, PCB's, Dioxins) and are an essential part of a healthy diet.

The Office of the State Veterinarian is establishing surveillance programs for newly emerging diseases, foreign animal diseases, zoonotic diseases and agriculture based terrorism threats. The laboratory will provide histological and analytical support for this surveillance. These threats, some of which have recently begun to appear in the United States pose a grave threat to agriculture, wildlife, and public health in Alaska, as well as to the $3.5 trillion agriculture industry of this country. Efforts to address this important public health function have been increased as the threat from increasing agricultural and animal imports and international travel to the state continue to rise.

Significant Changes in Results to be Delivered in FY2008

None.

Major Component Accomplishments in 2006

Transferred laboratory operations from the old Palmer facility to the newly constructed facility in Anchorage. Purchased, set-up, and validated new testing equipment. Recruited for and filled vacant positions (90% of staff) while making this transition.

Receiving Avian Influenza (AI) testing certification shortly after becoming operational was a significant accomplishment. Alaska's laboratory was only one of 40 in the nation to pass this rigorous testing certification. After receiving certification, completed over 2,500 AI tests on birds from Alaska.

Laboratory staff worked closely with Department of Transportation (DOT) throughout FY2006 to identify warranty items in the new Environmental Health Laboratory. Over 300 items were reported to DOT for corrective action by the responsible contractors.

The Laboratory staff underwent three critical inspections by federal agencies during FY2006. The Dairy product testing laboratory successfully passed a Food and Drug Administration inspection, the animal diagnostic laboratory passed the National Animal Laboratory Health Network inspection for the United States Department of Agriculture, and the Drinking Water testing laboratory received certification from the Environmental Protection Agency.

The Office of the State Veterinarian (OSV) initiated and sucessfully concluded several Foreign Animal Disease Investigations.

State-wide surveillance testing for AI was performed by the OSV at agricultural fairs as part of the state's Influenza Response Plan. Domestic poultry at agricultural fairs (Palmer, Kenai, Fairbanks, Kodiak), backyard flocks and commercial producers were tested. No High Pathogenic Avian Influenza was identified.

Statutory and Regulatory Authority

AS 03.05, AS 03.45, AS 03.58, AS 17.05, AS 17.07, AS 17.20, AS 44.46, AS 46.03, 18 AAC 15, 18 AAC 31, 18 AAC 32, 18 AAC 34, 18 AAC 80, 18 AAC 90

Contact Information

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Laboratory Services
Component Financial Summary

All dollars shown in thousands

	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	1,341.1	1,772.0	1,985.9
72000 Travel	36.9	51.1	51.1
73000 Services	584.2	792.5	783.5
74000 Commodities	157.8	217.9	196.9
75000 Capital Outlay	156.8	43.7	43.7
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	**2,276.8**	**2,877.2**	**3,061.1**
Funding Sources:			
1002 Federal Receipts	616.2	1,105.4	1,105.4
1003 General Fund Match	140.8	97.5	105.0
1004 General Fund Receipts	1,303.6	1,178.1	1,346.7
1005 General Fund/Program Receipts	51.0	158.7	164.5
1007 Inter-Agency Receipts	32.6	322.8	322.8
1052 Oil/Hazardous Response Fund	14.1	14.7	16.7
1061 Capital Improvement Project Receipts	118.5	0.0	0.0
Funding Totals	**2,276.8**	**2,877.2**	**3,061.1**

Estimated Revenue Collections

Description	Master Revenue Account	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		**0.0**	**0.0**	**0.0**
Restricted Revenues				
Federal Receipts	51010	616.2	1,105.4	1,105.4
Interagency Receipts	51015	32.6	322.8	322.8
General Fund Program Receipts	51060	51.0	158.7	164.5
Capital Improvement Project Receipts	51200	118.5	0.0	0.0
Restricted Total		**818.3**	**1,586.9**	**1,592.7**
Total Estimated Revenues		**818.3**	**1,586.9**	**1,592.7**

Summary of Component Budget Changes
From FY2007 Management Plan to FY2008 Governor

All dollars shown in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2007 Management Plan	**1,434.3**	**1,105.4**	**337.5**	**2,877.2**
Adjustments which will continue current level of service:				
-Fund Source Adjustment for Retirement Systems Increases	70.6	-60.0	-10.6	0.0
Proposed budget decreases:				
-PSP Testing - Reduction for One Time Appropriation	-62.5	0.0	0.0	-62.5
Proposed budget increases:				
-FY 08 Retirement Systems Rate Increases	173.8	60.0	12.6	246.4
FY2008 Governor	**1,616.2**	**1,105.4**	**339.5**	**3,061.1**

Laboratory Services
Personal Services Information

Authorized Positions	FY2007 Management Plan	FY2008 Governor	Personal Services Costs	
			Annual Salaries	1,175,141
Full-time	24	24	Premium Pay	0
Part-time	0	0	Annual Benefits	915,381
Nonpermanent	0	0	*Less 5.00% Vacancy Factor*	(104,622)
			Lump Sum Premium Pay	0
Totals	**24**	**24**	**Total Personal Services**	**1,985,900**

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Assistant	1	0	0	0	1
Administrative Clerk III	2	0	0	0	2
Administrative Manager I	1	0	0	0	1
Analyst/Programmer III	1	0	0	0	1
Assistant State Veterinarian	1	0	0	0	1
Assoc Coordinator	1	0	0	0	1
Chemist III	2	0	0	0	2
Chemist IV	1	0	0	0	1
Chief Environmental Hlth Lab	1	0	0	0	1
EH Biological Analysis Manager	1	0	0	0	1
Environ Health Off III	0	0	0	1	1
Laboratory Technician	4	0	0	0	4
Microbiologist I	2	0	0	0	2
Microbiologist II	2	0	0	0	2
Microbiologist III	1	0	0	0	1
Research Analyst III	1	0	0	0	1
State Veterinarian	1	0	0	0	1
Totals	**23**	**0**	**0**	**1**	**24**